



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,539	03/19/2002	Veikko Kankaanpaa	540-016.2	6927

4955 7590 10/20/2004

WARE FRESSOLA VAN DER SLUYS &  
ADOLPHSON, LLP  
BRADFORD GREEN BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER
----------

ALVO, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1731

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/088,539	Applicant(s) KANKAANPAA	
	Examiner Steve Alvo	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 8-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The restriction requirement in the last Office Action is repeated and made Final. The argument that the Figure 3 of EP 931 584 shows the dispersing device to have pyramidal teeth and not conical elements is not convincing as Figure 5 shows the surfaces to be conical in shape or at least truncated cones.

Claims 1-7 and 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 3, the term "the conical surfaces" is indefinite as "conical surfaces" does not have an antecedent basis. The term "impeller" is indefinite. The original specification referred to this element as a wheel. The term "impeller" was never used in the original specification. It is not clear how element (7) functions as an impeller. The original specification indicates that element (7) acts as a pump. It does not indicate that it acts as an impeller.

Claims 1-7 and 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term impeller was not originally disclosed. Page 5, lines 31-33 state that the pulp is transferred through the running wheel to the outlet and original claim 1 calls for the running wheel to act as a pump. The running wheel would appear to pump the pulp to the outlet. The term "impeller" is broader than a pump as it reads on certain agitators.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as Set forth in section

102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 931 584 in view with or without MARKHAM et al (5,733,412) or BERNARD et al (4,865,690).

EP 931 584 teaches a method of dispersing pulp containing solid material and a liquid phase in a dispersing device (Figure 1) wherein the dispersing takes place in a narrow opening (a) between rotating conical surfaces (3, 3', 3'') and (4, 4', 4'') on the rotor (2) and stator (1). At the outlet end of the disperser is an impeller (2, 7 and 7') acting as a pump to pump the dispersed material out of the dispersing device. If EP 931 584 does not teach dispersing pulp, especially waste paper, then MARKHAM et al (5,733,412) or BERNARD et al (4,865,690) teach using a dispersing grinder/refiner to disperse waste paper and remove contaminants from the waste paper. It would have been obvious to one of ordinary skill in the art to use the disperser/grinder/refiner of EP 931 584 to disperse waste paper and remove impurities from the waste paper in the manner as MARKHAM et al (5,733,412) or BERNARD et al (4,865,690) teach the use of dispersers to remove contaminants from waste paper. See MARKHAM et al, column 6, lines 17 and 34 for 25% consistency before dilution and 10% consistency after dilution.

Claims 4-7 and 17- 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 931 584 in view with or without MARKHAM et al (5,733,412) or BERNARD et al (4,865,690) as applied to claim I above, and further in view of KURTZ.

KURTZ teaches adding dilution fluid to the periphery of the dispersing device through conduit (31) and other conduits not shown. It is well known in pulp handling to use dilution

water to aid in the pumping of the pulp to bring the pulp to a pumpable consistency. It would have been obvious to one of ordinary skill in the art to use dilution conduits as taught by KIJRTZ to bring the pulp to a pumpable level in the disperser of EP 931 584 and/or the disperser of MARKHAM Ct al (5,733,412) or BERNARD et al (4,865,690).

The argument that the impeller (7) of EP 931 584 does not extend axially into the work zone is not convincing as claim 1 calls for an impeller (7) acting as a pump by which the pulp is pumped out of the dispersing device. The elements 2, 7 and 7' of EP 931 584 act to pump the pulp out of the dispersing device in the same manner claimed by Applicant.

The argument that the blades of EP 931 584 are not conical is not convincing as Figure 5 shows elements surfaces (3, 3', 3'') and (4, 4', 4'') to be conical in shape or at least truncated conical elements. Either way the claimed blades do not define over the blades of EP 931 584 nor do they function in a different manner. Applicant further argues that the instant process has a different flow pattern than the flow pattern of EP 931 584. However, the claims are broad and do not define over the flow pattern of EP 931 584. Besides, since the disperser of EP 931 584 appears to be very similar to the disperser of the instant process, the flow pattern would have been expected to be the same.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steve Alvo  
Primary Examiner  
Art Unit 1731

msa